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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Myeong-Bo Kim

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06/13/2008

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EXAMINER

DURNFORD-GESZVAIN, DILLON

ART UNIT

PAPER NUMBER

2622

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/713,199	Applicant(s) KIM, MYEONG-BO	
	Examiner Dillon Durnford-Geszvain	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Claims **1-14** are pending, and claim **9** is amended.

Response to Arguments

2. Applicant's arguments filed 2/27/2008 have been fully considered but they are not persuasive.
3. Regarding claim **14**, the Applicant argues that Vallone does not teach an icon that is stored in memory and displayed on a screen. The Applicant specifically suggests that the mode indicator 2705 is displayed and not stored. The Examiner disagrees. The mode indicator is displayed on the screen as part of the output of the apparatus of Vallone. Vallone teaches that the apparatus overlays images (the icon) on top of an analog TV signal (C5 L49-51). These images that are overlaid are generated somewhere (Vallone is not explicit about how the images are generated), and there must necessarily be instructions for constructing these images written in a memory. Therefore, it is inherent that the images (the icon) is stored in a memory.

The Applicant further argues that Vallone does not disclose generating still images, but merely discloses live video display. The apparatus taught by Vallone generates a stream of recorded still images (i.e. video) and overlays the trick play bar and mode indicator over these images (C20 L33-65).

Therefore, the rejection of claim **14** in view of Vallone will be maintained as

Vallon teaches storing and displaying an icon in association with still images.

4. Regarding claims **1** and **9** the Applicant argues that the M of Shioji is "merely displayed on the screen" and not stored. The Applicants argument is similar to that leveled against Vallone with regard to claim **14**. The Examiner disagrees, the icon M taught by Shioji is reproduced on the display in conjunction with other images. The apparatus of Shioji is not akin to a television that simply takes a signal that it receives from an antenna or other video source and reproduces that signal on the screen. Instead, the icon M of Shioji must be compiled for display somewhere in the apparatus itself. Therefore, somewhere in a memory of Shioji are instructions for making an image that looks like the image M of Fig. 6. The icon M of Shioji then is necessarily stored in a memory and not merely displayed.

The Applicant then argues against Vallone with a similar argument as that used in reference to claim **14**. See the response above regarding Vallone.

Therefore, the rejection of claim **1** over Shioji in view of Vallone will be maintained.

5. Regarding claims **8** and **13** the Applicant first argues that Shioji and Vallone do not teach the features as alleged by the Examiner. The Applicant then argues that Takayanagi does not teach selectively rotating an icon for indicating image display direction on said display screen to indicate a forward direction icon and a backward direction icon depending on whether said command selected the digital image and the

previous digital image, respectively, in the sequential display of the digital images.

The Examiner disagrees. It would have been obvious to one of ordinary skill in the art to use the rotating method of Takayanagi to rotate the forward or backward icons stored in Vallone as this would save space in a memory. Therefore, the rejection will be maintained.

Claim Rejections - 35 USC § 102

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claim **14** is rejected under 35 U.S.C. 102(e) as being anticipated by US 6,642,939 (Vallone).

As to claim **14**, Vallone teaches a digital image device for generating digital images, the digital image device comprising:

a first memory device 105 for storing the digital images (Column 5 lines 36-43);

a display device for displaying the digital images stored in the first memory device (See Fig. 26 and Column 19 lines 28-37, note that the images are displayed along with other graphics generated by the On-Screen Display, "OSD");

a mode selection device for selecting a screen display mode to display the digital images on the display device (Column 20 lines 22-50);

a second memory device 104 for storing an icon (see Fig. 27) for indicating image display direction (see Figs. 1 and 27 and Column 20 lines 51-65 and note that although Vallone does not explicitly disclose that the icon is stored in memory 104 there

is no other conceivable place to store the icon and the icon is clearly stored somewhere because it is displayed)

a processing device 106 for controlling the operation to display the digital images along with the icon (see Fig. 26),

wherein the icon shows a forward direction or a backward direction according to the image display direction (see Figs. 26 and 27 and Column 19 lines 60-67).

Claim Rejections - 35 USC § 103

8. Claims **1-7** and **9-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over US 7,193,646 (Shioji) in view of US 6,642,939 (Vallone).

As to claim **1**, Shioji teaches a digital image device for generating digital images, the digital image device comprising: at least one memory device 46 (see Fig. 1) for storing the digital images and at least one icon (M, see Fig. 6) for indicating image display direction; a user input device 13 for receiving user input commands comprising commands to retrieve selected ones of the digital images from said memory device for display; a display device 10 for displaying at least one of the digital images on a display screen; and a processing device 41 connected to said memory device, said user input device and said display device, and programmable to control the retrieval of at least one of the digital images and said icon from said memory device for display via said display device in response to one of said commands, to control the sequential display of the digital images in said memory device via said display device, and to configure the display of said icon to move to the next digital image in the sequential display of the

digital images that is selected via one of said commands (Column 8 lines 3-20).

What Shioji does not explicitly teach is that the arrow is shown either forward or backward depending on if the images are being selected in forward or backward order. However, Vallone teaches displaying either forward or backward facing arrows to display which direction images are being displayed (See Figs. 26 and 27 and note that forward or backward facing arrow icons are displayed over an image that is currently selected from a plurality of images, these arrows are used to indicate in which direction the stored images are being displayed. See Column 19 lines 60-67 and Column 20 lines 23-36 and 60-65).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have displayed the icon M of Shioji in either a forward or backward facing direction, as is taught by Vallone, based on whether the images are being moved through in a forward or reverse fashion. One of ordinary skill in the art at the time the invention was made would have recognized the problem of moving through images in a forward or reverse direction and not knowing which direction the images were previously being scrolled through and using this combination would remind a user which direction they were previously scrolling through the images in.

As to claim **2**, see the rejection of claim **1** and note that Shioji further teaches a digital image device as claimed in claim **1**, wherein said user input device comprises a forward image display direction button 13 and a backward image display direction button 13 for selecting, respectively, the next digital image and the previous digital

image in the sequential display of the digital images (Column 8 lines 12-20).

As to claim **3**, see the rejection of claim **1** and note that Shioji further teaches a digital image device as claimed in claim **1**, wherein said user input device comprises a button 12 for selecting a single mode or multi-mode of operation corresponding, respectively, to the display of a single digital image on said display screen, or the display of multiple digital images simultaneously on said display screen (Column 7 line 60 to Column 8 line 12 and note that the set button is used to select the multiple reproduction mode when the camera is in the state shown in Fig. 4B).

As to claim **4**, see the rejection of claim **1** and note that Shioji further teaches a digital image device as claimed in claim **1**, wherein said display device is operable to display multiple ones of the digital images simultaneously on said display screen (see Fig. 6).

As to claim **5**, see the rejection of claim **4** and note that Shioji further teaches a digital image device as claimed in claim **4**, wherein said multiple digital images are displayed in sequential order on said display screen (see Fig. 6).

As to claim **6**, see the rejection of claim **5** and note that the limitations of the present claim have been addressed in the rejection of claim **1** from which the present claim ultimately depends.

As to claim **7**, see the rejection of claim **1** and note that the limitations of the present claim have been addressed in the rejection of claim **1** from which the present claim depends.

As to claim **9**, Shioji teaches a method of controlling the display of digital images on the display screen of a digital image device, the digital image device being operable to provide a sequential display of digital images, the method comprising the steps of: receiving a first user command to select and display at first one of the digital images; displaying said first digital image on the display screen; displaying an icon proximally to said first digital image on the display screen to indicate that said first digital image is the selected image; storing the icon (see Response to Arguments above); receiving a second user command to select a second one of the digital images in the sequential display; and displaying said icon proximally to said second digital image (see Fig. 6 and Column 8 lines 3-20).

What Shioji does not explicitly teach is that the arrow is shown either forward or backward depending on if the images are being selected in forward or backward order. Vallone teaches displaying either forward or backward facing arrows to display which direction images are being displayed (See Figs. 26 and 27 and note that forward or backward facing arrow icons are displayed over an image that is currently selected from a plurality of images, these arrows are used to indicate in which direction the stored images are being displayed. See Column 19 lines 60-67 and Column 20 lines 23-36 and

60-65).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have displayed the icon M of Shioji in either a forward or backward facing direction, as is taught by Vallone, based on whether the images are being moved through in a forward or reverse fashion. One of ordinary skill in the art at the time the invention was made would have recognized the problem of moving through images in a forward or reverse direction and not knowing which direction the images were previously being scrolled through and using this combination would remind a user which direction they were previously scrolling through the images in.

As to claim **10**, see the rejection of claim **9** and note that Shioji further teaches a method of controlling the display of digital images as claimed in claim **9**, wherein the digital image device is operable to display a plurality of the sequential display of digital images simultaneously on the display screen, said simultaneously displayed digital images comprising at least said first digital image and said second digital image, and further comprising the step of moving said icon from said first digital image to said second digital image (see Fig. 6).

As to claim **11**, see the rejection of claim **10** and note that Shioji further teaches a method of controlling the display of digital images as claimed in claim **10**, further comprising the step of receiving a third user command to select one of a single mode and a multi-mode operation, the digital image device being operable to display one of

the digital images on the display screen when in the single mode and to display a plurality of the digital images simultaneously on the display screen when in the multi-mode (Column 7 line 60 to Column 8 line 12 and note that the set button is used to select the multiple reproduction mode when the camera is in the state shown in Fig. 4B).

As to claim **12**, see the rejection of claim **9** and note that the limitations of the present claim have been addressed in the rejection of claim **9** from which the present claim ultimately depends.

Claim Rejections - 35 USC § 103

9. Claims **8** and **13** are rejected under 35 U.S.C. 103(a) as being unpatentable over US 7,193,646 (Shioji) in view of US 6,642,939 (Vallone) in view of English Abstract of JP 10-240218 (Takayanagi, cited in Applicant's IDS).

As to claim **8**, although Shioji nor Vallone teach that an icon is rotated to create forward and backward icons, Takayanagi teaches rotating an icon (abstract). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have rotated the icon taught by Shioji in view of Vallone as this would allow for the icons used to show forward or backward movement to use a minimum of space.

Claim **13** corresponds to claim **8** but is drawn to a method instead of an

apparatus and therefore is rejected on the same grounds as claim 8 but drawn to a method instead of an apparatus.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dillon Durnford-Geszvain whose telephone number is (571)272-2829. The examiner can normally be reached on Monday through Friday 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David L. Ometz/
Supervisory Patent Examiner, Art Unit 2622

Dillon Durnford-Geszvain

6/8/2008

